

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Broadcom Corporation
 Application No. : 09/143,476
 Filed : August 28, 1998
 Title : APPARATUS FOR, AND METHOD OF, REDUCING POWER
 DISSIPATION IN A COMMUNICATIONS SYSTEM

Grp./Div. : Not Assigned
 Examiner : Not Assigned

Docket No. : 34278/JWE/B600

SUBSTITUTION OF ATTORNEY

Assistant Commissioner for Patents
 Washington, D.C. 20231

Commissioner:

BROADCOM CORPORATION, assignee of the entire interest in and to the above-identified United States patent application under an Assignment recorded in the U.S. Patent and Trademark Office on August 28, 1998, a copy of which is attached, hereby revoke(s) all powers of attorney previously given and appoint(s):

R. W. Johnston	(17,968)	Vincent G. Gioia	(19,959)	Kathleen M. Olster	(42,052)
D. Bruce Prout	(20,958)	Edward R. Schwartz	(31,135)	Daniel M. Cavanagh	(41,661)
Hayden A. Carney	(22,653)	John D. Carpenter	(34,133)	Molly A. Holman	(40,022)
Richard J. Ward, Jr.	(24,187)	David A. Plumley	(37,208)	Lucinda G. Auciello	(42,270)
Russell R. Palmer, Jr.	(22,994)	Wesley W. Monroe	(39,778)	Norman E. Carte	(30,455)
LeRoy T. Rahn	(20,356)	Grant T. Langton	(39,739)	Joel A. Kauth	(41,886)
Richard D. Seibel	(22,134)	Constantine Marantidis	(39,759)	Patrick Y. Ikehara	(42,681)
Walter G. Maxwell	(25,355)	John W. Eldredge	(37,613)	Mark Garscia	(31,953)
William P. Christie	(29,371)	Gregory S. Lampert	(35,581)	Gary J. Nelson	(P-44,257)
David A. Dillard	(30,831)	Craig A. Gelfound	(41,032)	Raymond R. Tabandeh	(P-43,945)
Thomas J. Daly	(32,213)	Syed A. Hasan	(41,057)	Phuong-Quan Hoang	(41,839)

all members or associates of or of counsel to the firm CHRISTIE, PARKER & HALE, LLP, telephone 626/795-9900, as principal attorneys with power to appoint associate attorneys, to prosecute this application and any subsequent application based on the disclosure of this application, and to transact all business in the Patent and Trademark Office connected with this application and any subsequent application.

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING
 DEPOSITED WITH THE U.S. POSTAL SERVICE AS FIRST CLASS MAIL
 IN AN ENVELOPE ADDRESSED TO: COMMISSIONER OF PATENTS
 AND TRADEMARKS, WASHINGTON, D.C. 20231, on

March 11, 1999
 3-11-99
 (DATE SIGNED) *Marianne Parker*

0930504-031501

1990-1991		1991-1992		1992-1993		1993-1994		1994-1995		1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197		2197-2198		2198-2199		2199-2200		2200-2201		2201-2202		2202-2203		2203-2204		2204-2205		2205-2206		2206-2207		2207-2208		2208-2209		2209-2210		2210-2211		2211-2212		2212-2213		2213-2214		2214-2215		2215-2216		2216-2217	
-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--

Please address all correspondence to **CHRISTIE, PARKER & HALE, LLP, P.O. Box 7068, Pasadena, California 91109-7068.**

Date 3-10-99

By

Kenner Lane

Henry Samuelli
Co-Chairman of the Board
Chief Technical Officer

MG IRV19179.1-* -3/10/99 10:08 am

ASSIGNMENT

Docket No. BRCOM-47966

WHEREAS, we, OSCAR E. AGAZZI, JOHN L. CREIGH, and MEHDI HATAMIAN, respectively, have invented certain new and useful improvements in APPARATUS FOR, AND METHOD OF, REDUCING POWER DISSIPATION IN A COMMUNICATION SYSTEM for which we have today executed application papers for the United States Letters Patent thereon; and

WHEREAS, BROADCOM CORPORATION, a corporation of the State of California, hereinafter called Assignee and having its offices and place of business at 16251 Laguna Canyon Road, Irvine, CA 92618, is desirous of acquiring the entire right, title and interest in and to the aforesaid invention and in and to any and all Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto;

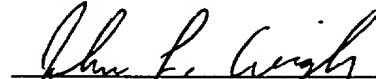
NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by the said Assignee, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we OSCAR E. AGAZZI, JOHN L. CREIGH and MEHDI HATAMIAN, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said invention as described in said application, and in and to all Letters Patent granted therefor, and all divisions, reissues and continuations thereof, and we hereby authorize and request the Commissioner of Patents to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, as assignee of the entire right, title and interest, and we covenant that we have full right so to do and agree that we will communicate to said Assignee, or its successors, any and all facts known to us regarding said invention whenever requested and will testify in any legal proceeding, sign all lawful papers, execute all divisional, reissue and continuation applications, and generally do everything possible to aid said Assignee, its successors and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Executed this 12th day of Aug., 1998

DATED: 8/12/98


OSCAR E. AGAZZI

DATED: 8/12/98


JOHN L. CREIGH

DATED: 8/12/98


MEHDI HATAMIAN

DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION

As the below named inventors, we hereby declare that:

Our residences, post office addresses and citizenships are as stated below next to our names.

We believe that we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled APPARATUS FOR, AND METHOD OF, REDUCING POWER DISSIPATION IN A COMMUNICATION SYSTEM the specification of which (check one)

X is attached hereto

 was filed on

As United States Application Number or PCT International
Application No. , and was amended on (if
applicable)

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above.

We acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

We hereby claim foreign priority benefits under 35 U.S.C. § 119 (a) - (d) or § 365 (b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)		Priority Claimed		
Number	Country	Day/Month/Year Filed	Yes	No
<u>NONE</u>	_____	_____	_____	_____
_____	_____	_____	_____	_____

We hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, we acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

<u>NONE</u>	_____	_____
Appln. Serial No.	Filing Date	Status
_____	_____	_____

We hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: RICHARD A. BARDIN, Reg. No. 20,365, CRAIG B. BAILEY, Reg. No. 28,786, RICHARD B. CATES, Reg. No. 36,100, JOHN K. FITZGERALD, Reg. No. 38,881, GILBERT G. KOVELMAN, Reg. No. 19,552, THOMAS H. MAJCHER, Reg. No. 31,119, JOHN S. NAGY, Reg. No. 30664, ELLSWORTH R. ROSTON, Reg. No. 16,310, JAMES W. PAUL, Reg. No. 29,967, THOMAS A. RUNK, Reg. No. 30,679, and DAVID S. SARISKY, Reg. No. 41,288. Direct all telephone calls to ELLSWORTH R. ROSTON, at telephone No. (310) 824-5555.

Address all correspondence to:

FULWIDER PATTON LEE & UTECHT, LLP
 10877 Wilshire Boulevard, Tenth Floor
 Los Angeles, California 90024

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United

States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: OSCAR E. AGAZZI

Inventor's signature:

Date: August 8, 1998

Residence: Irvine, California

Citizenship: Argentina

Post Office Address: 38 Deerfield Street
Irvine, CA 92606

Full name of second inventor: JOHN L. CREIGH

Inventor's signature:

Date: August 12, 1998

Residence: Rancho Santa Margarita, California

Citizenship: United States of America

Post Office Address: 19 Obispo
Rancho Santa Margarita, CA 92688

Full name of third inventor: MEHDI HATAMIAN

Inventor's signature:

Date: 8/12, 1998

Residence: Mission Viejo, California

Citizenship: United States of America

Post Office Address: 25681 Pacific Hills Dr.
Mission Viejo, CA 92692